overall success rate is about 75 percent even under optimal conditions of cell culture and analysis. Physicians must bear in mind that diagnostic amniocentesis should be undertaken with the understanding that abortion is the only available therapy.

JEAN-JACQUES CASSIMAN, M.D.

REFERENCES

Milunsky A, Littlefield JW, Kanfer JN, et al: Prenatal genetic diagnosis. N Engl J Med 283:1370-1381, 1441-1447, 1498-1504, Dec 17, 24, 31, 1970

Polani PE: Prenatal cytological recognition of sex-linked and chromosomal abnormalities. J Obstet Gynaecol Br Commonw 78:1024-1030, Nov 1971

Status of C Type Virus in Cat Tumors

C type RNA tumor viruses are proved to be the causative agents of malignant lymphoma and sarcoma in domestic cats. The incidence of feline lymphoma is four to five times greater in cats than in humans. There is no convincing evidence for infectious spread of these agents under natural conditions between cats or from cats to other animals or to man. Evidence suggests but does not prove that the C type virus genome is inheritable, presumably in the form of DNA.

House cats differ from other randomly bred vertebrate species in showing a marked degree of spontaneous expression of their latent C type virus genome in the form of group-specific antigen and replicating C type particles.

A human sarcoma cell line, previously free of C type virus particles, started to produce large numbers of such virus particles after transplantation into a fetal kitten. This virus (RD-114) proved to be no known cat or other mammalian C type virus and may thus be wholly or partially of human origin.

MURRAY B. GARDNER, M.D.

REFERENCES

Gardner MB: Current information on feline and canine cancers and relationship or lack of relationship to human cancer. J Natl Cancer Inst 46:281-290, Feb 1971

McAllister R, Nicholson M, Gardner M, et al: C-type virus released from cultured human rhabdomyosarcoma cells. Nature (in press)

Evaluation of Hepatotoxicity by Electron Microscopy

Examination of liver biopsy material with the electron microscope can be a useful aid in studying the potential hepatotoxicity of drugs and environmental toxins. Light microscopy frequently reveals only minimal fatty changes, not necessarily indicative of liver abnormality. Ultrastructural studies, however, often disclose proliferation of the smooth endoplasmic reticulum as well as mitochondrial enlargement; also, crystalline inclusions may be found within the mitochondrial matrix. Other alterations include the development of autophagosomes, pigment inclusions, and, with some compounds, increased numbers of microbodies. Proliferation of the smooth endoplasmic reticulum is associated with increased activity of some of the enzymes located in the microsomal fraction.

Although all of these changes have been found in apparently healthy persons, their presence should alert the physician to the possibility of hepatic injury.

Recent studies on the hepatoxicity of methotrexate indicate that abnormalities may persist for months or even years after the hepatotoxin is withdrawn.

JOHN C. LEE, M.D.

REFERENCES

Wills EJ: Crystalline structures in the mitochondria of normal human liver parenchymal cells. J Cell Biol 24:511-514, Mar 1965

de la Iglesia FA, Sosa-Lucero JC, Lumb G: Ultrastructural hepatic changes following the administration of benzylideneyohimbol. Toxicol Appl Pharmacol 16:239-255, Jan 1970

Lymphomatoid Granulomatosis

Lymphomatoid granulomatosis is a lymphoproliferative disorder associated with angiitis and granulomatosis of the lung, resembling and possibly related to Wegener's granulomatosis. The pulmonary lesions are usually multiple, bilateral